

To: Chancellor Kaya Henderson
From: Education Resource Strategies
Date: August 17, 2012
Re: Summary of Resource Reallocation Opportunities in DCPS

Over the past five years, DCPS has achieved dramatic district reform of a nature and depth rivaled by few other districts around the country. Key among these reforms has been the development of IMPACT, which allows the district to identify its strongest and weakest teachers as well as their primary development areas, and a robust formative assessment system that provides teachers with real time data on what students know. Further, the district has worked to put a great leader in every school, while also investing in low spans of control for principal supervisors to ensure these leaders have the support they need. As a non-profit organization dedicated to helping urban school systems across the country to rethink the use of resources to achieve student success at scale, ERS is excited about DCPS's reform progress and optimistic about the impact of the next phase of the reform on student performance.

Beginning in the fall of 2011, DCPS partnered with ERS to identify opportunities to strategically reallocate resources in order to invest in the district's priority goals – in part to identify funding for the district's work to ensure its most effective teachers are highly paid, and more broadly to help DCPS articulate a resource strategy that would help the district build on all that it has accomplished to date in its next phase of reform. ERS mapped DCPS' current use of talent, time, and money through a quantitative analysis of district data pertaining to expenditures, school organization and scheduling, student performance, and staffing. Drawing on experience working with large urban districts around the country, ERS compared DCPS resource use to benchmark data compiled from a group of comparable school districts and to research-based best practices.¹ In addition to quantitative analysis, ERS conducted informational interviews with top-level staff across most of the district's Central Office departments and visited a variety of schools selected to represent a diversity of perspectives on resources use.

Our analysis suggested that capitalizing on reforms to date in order to drive the kind of dramatic gains needed to meet the district's ambitious performance goals will require fundamentally changing the way resources in DCPS schools are organized. Despite significant advances in data on student need and teacher effectiveness, most schools are still largely organized based on the assumptions that all teachers have the same set of skills and that the best information we have about students is their age and their pass rate on an annual exam. The next phase of reform must focus on fundamentally reorganizing talent, time, technology, and budgets to enable teachers with varying strengths and effectiveness levels

¹ ERS uses a detailed common coding scheme to ensure that comparisons by category reflect real difference and not differences in the way districts report spending, and adjusts for cost of living differences across regions and years. Analysis focused on FY12 fiscal data and SY11-12 school data; all financial analysis focuses on PreK-12 operating expenses only. This includes categorical funding (e.g. Title I) and excludes non-operating expenses such as capital and debt service.

to successfully use newly available data to adjust instruction, time and attention to respond to student progress.

ERS engaged the Chancellor and her management team on our analysis and its implications through a series of working sessions and report-outs over the past year. This memo brings together ERS' detailed analysis of resource use and the collective thinking of ERS and the management team during these working sessions to recommend three specific near-term levers the district must pull to reorganize existing resources:

- Close/consolidate small schools to enable more strategic use of school-level resources and to free resources currently invested in small school size for strategies better aligned with student need
- Evolve processes, timelines, and policies to better support and enable school leaders to make strategic resource use decisions
- Pursue other targeted reductions where spending is misaligned with school and district priorities, shifting these resources to higher priority areas

The remainder of the memo lays out these recommendations in more detail, providing background and rationale based on resource use data and briefly discussing implementation considerations in each area based on DCPS specific context and ERS experience across other districts.

I. Close/consolidate low-enrollment schools

Background and Rationale. ERS has found that high-performing schools organize talent, time, technology, and money consistent with school priorities and the instructional model to:

- Create and support teacher teams, differentiate roles, and promote individual growth to maximize student learning and teacher continuous teacher improvement
- Organize and use time strategically, maximizing time on core and linking learning to needs
- Create targeted individual attention for students and foster personalized relationships between students and teachers

Dramatic improvement is possible when expert teaching teams with roles matched to their diverse skills collaborate regularly, using data to target time and attention to meet student needs on an ongoing basis.

Like in other districts around the nation, small school size in DCPS is currently a significant barrier to the organization of school-level resources consistent with these principles at sustainable funding levels. And, DC has more small schools in its portfolio than any other district ERS has studied, with 63% and 38% of ES/K8 and secondary schools smaller than 350 students, respectively. Specifically, small schools in DCPS face the following primary resource use challenges.

Key Small School Resource Use Challenge	Detail
Very small teacher teams	<ul style="list-style-type: none">• Grade level (ES) and subject (MS/HS) teams are often only 1-2 teachers, which is too small for

	effective collaboration & means broader teacher expertise is required
Targeting resources for small and flexible groups is more difficult	<ul style="list-style-type: none"> • Harder to be deliberate and strategic about class size • Too few classes per grade for skill-based regrouping
Harder to efficiently utilize specialized staff (SPED & ELL)	<ul style="list-style-type: none"> • Specialized staff in small schools often have lower case-loads
Very expensive for small high schools to offer comprehensive programming	<ul style="list-style-type: none"> • Maintaining broad elective and advanced programming means these courses are often very small at smaller schools

Related to these challenges, as in most districts around the country, smaller schools in DCPS are more expensive to operate than larger schools. For example, at the Elementary level, ERS has found that schools smaller than 350-400 often cost significantly more than larger schools, and beyond enrollments of about 550 students, additional spending due to size diminishes.² DCPS spends an average of \$1.4K and \$2.3K more per pupil in elementary schools and K8 schools respectively, below 350 compared to those above 550. Size-based spending differentials at other levels are harder to calculate due to smaller numbers of schools, but an even stronger relationship between size and spending at these levels suggests that size premiums are even higher at secondary schools.

Though this is actually a lower per-student premium than many districts face, as noted above, DCPS has a unique resource challenge with regard to small schools because of the large share of schools in its portfolio that are small. As a result, DCPS spends more on small school size than any other district ERS has worked with. At the ES/K8 level alone, total spending on small school size is \$21.7 M.³ Savings amounts from closure can vary significantly and depend on schools selected for closure and where affected students ultimately reenroll.

Implementation. In order to improve resource use within schools, and capture a portion of its spending on school size for more deliberate and strategic investments, the district must close and consolidate schools. In addition to other key factors such as school performance and community needs, closure and consolidation decisions should be made with an eye toward resolving the resource use challenges described above.

It is important to note that districts and communities are often seeking specific benefits from small school size (e.g. students may be more known, transportation may be easier), and costs and other tradeoffs associated with size must be weighed against any evident benefits. Ultimately, the objective of closure must be to structure the district's portfolio to maximize enrollment in highly effective or high-potential schools in a cost-sustainable manner.

² This pattern is true across school levels, though with slightly different cost curves.

³ Calculated by bringing spending on pupils in schools under 350 to the average per-pupil spending level at a school with 550 students.

II. Evolve processes, timelines, and policies to better support and enable school leaders to make strategic resource use decisions

Background and rationale. Our analysis of resource use across DCPS schools showed several common resource misalignments, based on the principles laid out in the previous section that the district must address to continue its path toward improved student performance. Significant resources are tied up in many of these misalignments; ERS' analysis identified over \$45M in non-strategic spending in schools, including high levels of spending on non-teaching staff, very small class sizes in lower-priority areas, and a large investment in special education compliance and administration (more detail on these opportunities in section III). In order to accomplish more with the resources they have, schools must reallocate these resources to other areas that better support their priorities. Finally, as stated above, taking advantage of the rich student and teacher information system the district has built over the past several years means using resources in new ways that are much more flexible to variation in student need, both across students and over time.

Description. Given these challenges and opportunities, the following are key objectives for improving the use of school-level resources across DCPS schools.

Design Objective	Current status
More deliberately assign teachers to better match expertise to student need, and deliberately create highly effective teaching teams ⁴	No evidence of practice: <ul style="list-style-type: none">• Principals do not report organizing teams with balanced expertise (school size is a big barrier)• Teachers have sufficient release time (105 minutes per day at ES and 140 at MS/HS), but seldom use time for highly effective collaboration in teams that share learning goals
Increase teacher role differentiation	<ul style="list-style-type: none">• Most teachers have similar roles, regardless of expertise or specific pedagogical strengths (MS/HS teachers specialized by content area)
Better match school schedules/use of time to student need and school priorities	<ul style="list-style-type: none">• Decisions about the schedule structure are often misaligned with school priorities and student need• Schedules are often unresponsive to differences in need across students and over time, with struggling students often receiving too little real-time support to catch-up
Better match group size to student need and school priorities, including increasing class sizes in lower-priority areas	<ul style="list-style-type: none">• With average class sizes of ~20 across most grades and subjects, schools have prioritized dollars to low class size across the board• Most often, class size defines group size, with too few opportunities for small and flexible groups for targeted subjects, skills, and student needs• Large SPED investment is the primary resource for smaller grouping, but resources are often inflexible and not aligned with GenEd instruction
Integrate support for students' social emotional needs with core instruction and school-wide culture	<ul style="list-style-type: none">• Despite a \$955 per-pupil annual investment in this area (higher than most other districts ERS has studied), students' social emotional needs are the biggest barrier to student achievement that teachers and principals identify• Isolated support delivery – with classrooms and the broader school

⁴ See continuous improvement section for more detail on teacher teams.

	environment often lacking tools and structures to support basic social emotional needs – means services are oversubscribed and less effective
Reduce non-instructional spending	<ul style="list-style-type: none"> • DCPS currently invests more in school-based non-teaching staff than any other district ERS has worked with, with an average of one non-teaching adult for every teacher

Implementation. To meet the objectives described above, DCPS must revise the processes, timelines, and policies surrounding school-level resource use decisions. Specifically, the district must:

- Revise the timeline for school budget and other resource use decisions
- Increase central support for key resource use decisions such as school scheduling and teacher assignment, including providing templates for effective resource use and improved data to guide resource decisions
- Work to clear existing policy barriers to effective resource use decisions

In the short-term, this will likely require additional central investment to build supports that do not currently exist, such as increased support for schools around effective scheduling and staffing models. However, as noted above, improving the use of resources in schools will also allow the district to free significant resources over time as schools reduce non-strategic investments.

There are several ways the district could think about breaking the work into smaller pieces to phase implementation consistent with capacity constraints:

- Start by revising the process and timeline surrounding resource use decisions to enable more effective resource use decisions across all schools, with increased and more sophisticated support coming later.
- Start with a small group of “ready” schools that have strong and innovative leadership teams to build a set of templates for new designs and explore needed revisions to district systems.
- Focus on selected school levels. The unique need for closure/consolidation at the MS level (given the large number of very small schools) together with the district’s large investment of resources in FSS programming create a compelling rationale for a focus on new designs at the MS level. Similarly, the concentration of low-performing students in non-selective, comprehensive high schools that results from the specialty structure at the high school level requires new designs in these schools that better support the needs of low-performing students, particularly in the 9th grade.
- Across all schools, take on certain design objectives first (e.g. improving teacher assignment and teaming), selecting initial focus areas based on both importance and ease of implementation.

III. Pursue targeted reductions where spending is misaligned with school and district priorities, shifting these resources to higher priority areas

There are several other major areas in which DCPS can reduce spending in order to use resources more efficiently and direct dollars to highest priority areas, including its efforts to compensate teachers on the basis of their performance. These areas are summarized below. As noted above, \$45M of the \$77M in

total savings opportunities identified below requires or is linked to taking action to improve the use of school-level resources as described in section II (see above). Note that the quantifications included here are not exact, but are based on ERS' best estimates of plausible savings scenarios.

Reduce the number of non-teacher adults in schools [\$25M]. DCPS currently invests in more school-based non-teaching staff at every school level than any other district ERS has worked with. In fact, reducing the gap between the number of school-based non-teacher FTE per 1000 students in DCPS and the average across a set of comparative districts ERS has worked with by just 1/3 would save a total of \$30M dollars (see table below). We have reduced total estimated savings to \$25M to isolate this savings opportunity from savings from closure, which is discussed separately above.

School-based, non-teacher FTEs	DC, FTE/1000 students	Avg Non-DC, FTE/1000 students	Savings opportunity (if cutting gap by 1/3)
Elementary Schools (grades PreK-5)	68	40	\$17M
Middle School (grades 6-8)	81	43	\$7M
High School	54	29	\$6M
Total			\$30M

There are three primary reasons DCPS schools have more school-based non-teacher FTE:

- **Cycle of specialization affecting social emotional support and special education services:** A cycle of specialization occurs when schools and classrooms do not have the tools to support students' more individualized tier one needs. Currently, in DCPS this is resulting in large numbers of out-of-class referrals for special education, disciplinary issues, and social emotional services, which thus leads to large numbers of specialized social/emotional and special education focused FTEs. Unfortunately, this disproportionate investment of resources outside the classroom leads to fewer resources available to serve tier one needs within classrooms, perpetuating the cycle of specialization.
- **High level of investment in non-teacher instructional experts:** DC schools have very low teacher-instructional expert ratios compared to other districts ERS has worked with. For example, at the middle school level, there is one Assistant Principal (AP) or coach for every 7 teachers, compared with an average of 13 across other comparative districts.⁵ This investment in non-teacher instructional experts is strategic when schools are in a phase of developing teacher expertise and APs and coaches are strong and used well. The district has an important opportunity to better leverage this investment in the short-term to build teacher expertise for the long-term, which will in turn enable a scale-back in non-teacher expertise. Exploration of staffing reductions in this area must consider any implications for resources available to conduct IMPACT teacher evaluations.
- **Small schools:** Small schools lead to low student-staff ratios, as positions that are allocated on a one-per-school basis (e.g. the principal) are spread over fewer students.

⁵ DCPS' Master Educators are not included in these ratios because they are not dedicated to individual schools.

Fully capturing this savings opportunity (scaling back the extra investment in small schools) would generate savings for the district, as noted above, but it is also very high-risk in terms of potential negative impact on the school design and ultimately on the students. Strategically reducing FTE will require the district to take deliberate steps to support schools in reorganizing to increase the productivity of talent, such that schools are able to do MORE rather than less with fewer staff. This is directly linked to the imperative to transform school designs to create new ways of organizing resources to rebuild the capacity of teachers and classrooms over time, thus diminishing the need for specialized and expert non-teacher resources.

Increase class size in targeted areas [\$9M]. DCPS schools have relatively low general education class sizes, especially at the secondary level (see table below). As mentioned above, when resources are organized strategically, the low student-teacher ratios that come with low class sizes can be a great asset to providing individual attention in high priority areas. However, class sizes in DCPS are low across the board, and in fact, sometimes smaller in low-priority areas than high-priority areas. For example, at DC’s non-selective comprehensive high schools, non-core classes average 15 students, while standard 9th grade ELA classes average 20 students. At the elementary and middle school levels, non-core average class sizes are on par with ELA and math classes. Raising non-core class sizes to 25 would generate a total savings of \$9M.

Average GenEd Class Size

School Level	DCPS	National Average ⁶	Duval County	Prince George’s County	Denver	DCPS Non-Core	Savings from Raising NC Class Size to 25
ES	20.6	20.5	18	22	23	20.6	\$4 M
MS	20	24.3	23	N/A	26	20	\$1 M
HS	20	24.3	24	25	25	15	\$4 M

Raising non-core class sizes at the elementary level would require schools to “pool” homeroom classes for specials, sending four classrooms, for example, to only three specials classes. This strategy is easier to implement in larger schools that have more classrooms at any grade level, thus capturing savings at the elementary level is tied to school closure and consolidation. At the secondary level, schools face a different size-related challenge. At small schools, smaller numbers of students mean that offering diverse electives results in small class sizes. Increasing non-core class sizes in small secondary schools without narrowing programming will therefore also require school closure/consolidation. Additionally, the district could explore reducing the cost of small classes in lower-priority areas through more innovative course delivery options such as community partnership and technology-based courses. Regardless of the strategy used, reorganizing resources to better target investment to core and other high priority areas will require the district to support new designs that provide schools with models for doing so and is thus dependent on work to transform school designs (see recommendation #1).

⁶ National Average data from NCES 2007-2008. Includes all students.

Free resources from non-strategic teacher compensation spending [Up to \$30M]. DCPS has achieved a great deal with its compensation reforms to date and is an often cited model for similar reforms in other districts around the country. Still, continued evolution of compensation spending will be necessary to support the district's strategic goals in a financially sustainable way. Hitting the goal of 90% of teachers effective or highly effective in FY17 will result in a compensation cost increase of \$38M, or 11% (not including any growth in benefits) from FY12 spending levels, and yet reaching that 90% will also require making key investments in other areas outside teacher compensation.

One opportunity to offset increased strategic spending on effectiveness pay as teachers get better is by decreasing compensation spending in areas that are non-strategic. There are four primary areas of non-strategic compensation spending:

- Paying for steps that were earned purely for experience, without any minimum effectiveness threshold
- Paying for education credits
- Paying high salaries for teachers who have demonstrated effectiveness inconsistently, but have stayed in the system for a long time
- Paying higher than competitive salaries for new hires who aren't effective and who eventually are separated

The table below shows potential revisions to the compensation system that would reduce non-strategic spending. According to our analysis, the district could save up to \$30M on projected FY17 spending by reducing non-strategic compensation spending, an amount that would go a long way toward offsetting rising costs.⁷

Potential Revision	Approx. Annual Fiscal Impact in FY17
"Lower" first two steps by letting gap with other districts close	~\$3M
No step bump for Developing rating	~ \$6M
Step limits within career levels	~ \$13M
Remove lane bumps for education credits	~ \$14M

Reduce special education spending through better integration with general education and reduced spending on program management [\$11.4M]. DCPS spends more on special education than most other districts ERS has studied, resulting in fewer resources available for the general education setting. The average general education student in Atlanta, for example, is funded at \$14K per-pupil compared to DC's \$12.8K, though Atlanta's overall per-pupil spending is only 90% of DCPS'.

Two primary factors drive DC's higher costs:

⁷ Note that savings opportunities in the table total to \$36M, not \$30M, because there is some overlap between savings opportunities associated with different potential revisions.

- More students are identified in DCPS for specialized services and identified students are served in more intensive (and therefore more expensive) settings. 18.8% of DCPS students are identified for special education (including out-placed students), as compared with an average of 13.6% nationally, and 13% across other districts ERS has worked with.
- At \$4.3K per special education pupil, DCPS' spending on special education program management is 2.6 times the average across other districts ERS has studied. Driving this disproportionate investment is a large number of central special education management FTE. While DCPS has 21 central FTE for every 1000 SPED students, other ERS districts range from 3-8 FTE. In addition, unlike many other districts, DCPS has invested in a special education coordinator position at every school (this investment was reallocated for FY13). This high level of program management spending is tied to the district's efforts in recent years to improve special education compliance and free itself from several court orders.

The next evolution of special education strategy and spending must shift from a focus on compliance and management to ensuring high quality programming at the school level. The district has an important opportunity to make this shift while also reinvesting resources in a general education environment that offers every student an education tailored to their unique needs. This will require action in two primary areas:

- Transforming school designs (as described in memo #1) to create schools in which students don't have to be identified for special education to receive targeted individual attention. Over the long-term, this will reduce special education identification rates and free up resources to be reinvested in targeted attention strategies within the general education environment. As a first step, the district should target more intensive general education interventions at the early elementary level, to reduce the spike in identification rates that typically happens in later elementary grades. Additionally, given the significant resources currently tied up in special education, beginning to transition to whole schools that are more supportive of individualized needs will first require a much deeper integration of special education and general education resources and services. Reducing identification rates by 10% across in-district resource and self-contained settings (with reductions in self-contained through transition of self-contained students to less restrictive settings) would save the district \$8M.
- Reducing management FTE, with a focus on central personnel. Over the coming years, as the district continues to build capacity among teachers and other experts within schools to deliver high quality and individualized general education programming, as well as legally compliant and effective special education programming, this will enable a scale-back in central expertise and support to levels more on par with other districts. Reducing the gap between central FTE in DCPS and that in the district with the next highest number of FTE by just 50% would save the district \$3.4M.

Reduce central spending on finance, budget, & purchasing functions [\$2M]. DCPS spends \$262 per pupil on its finance, budgeting, and purchasing function, compared with an average of \$158 per pupil across comparison districts. Disproportionate spending in this area has not been deliberate, nor is it

aligned with core district strategy. Notably, additional spending within the finance function is on more lower-paid employees. Boston Public Schools, for example, which is similarly funded and similarly sized, has four FTE below the professional level, while DCPS has 30. The utilization of lower-skilled staff will be key to explore as a part of any reduction strategy. Reducing the difference between DCPS central spending on the finance, purchasing, and distribution function and that of other districts by half would save the district \$2M.

Concluding Thoughts

With one of the highest overall funding levels of the large, urban district ERS has studied, DCPS has the resources to accomplish incredible things, paying its effective and highly effective teachers high salaries that help keep them in teaching, ensuring struggling students have time to receive targeted attention in small groups with the most effective teachers, and providing rich social and emotional support. The first steps will be to close/consolidate small schools and revise processes, timelines and policies around resource use to ensure school leaders have the required flexibility from constraints and supports to make strategic resource use decisions. Further, the district must take action to ensure resources are reallocated where they are currently misaligned with strategy as outlined above.

These changes will require the district, schools, and the DC community to make difficult and painful choices, particularly in the areas of school closure and resource reallocation. Yet, ultimately, they will be critical to DCPS's broader effort to meet the ambitious goals it has set for itself and transform into a school system defined by both equity and excellence.